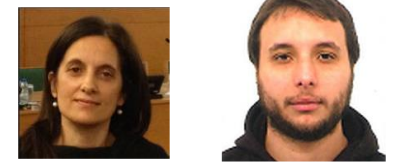
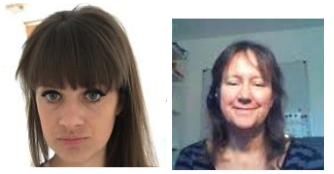
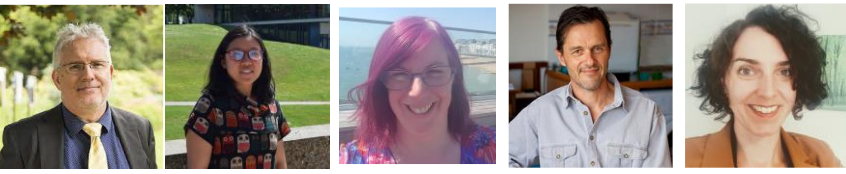


The empathetic refutational interview: A tool to support healthcare professionals in addressing vaccine misconceptions

Dawn Holford and the JITUSVAX team*



Co-funded by the Horizon 2020 programme of the European Union



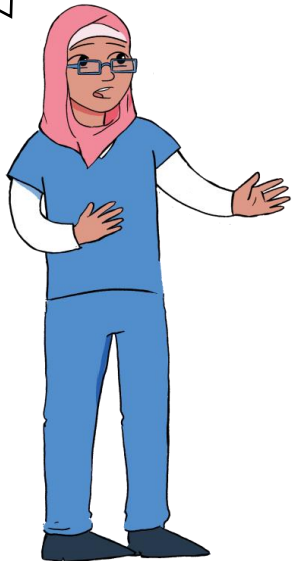
JITSUVAX:
"Turning misinformation
into a teaching tool"



Challenge: vaccine conversations can be hard

But studies have shown the vaccine is safe and effective! It will help protect you!

I don't want another vaccine. It'll overload my immune system.



No, that doesn't make sense at all. I know my body reacts to a vaccine, how can that be safe?

**Provide
factual
information**

But:

- **People aren't always receptive**
- **Anticipating resistance puts us off starting conversations**



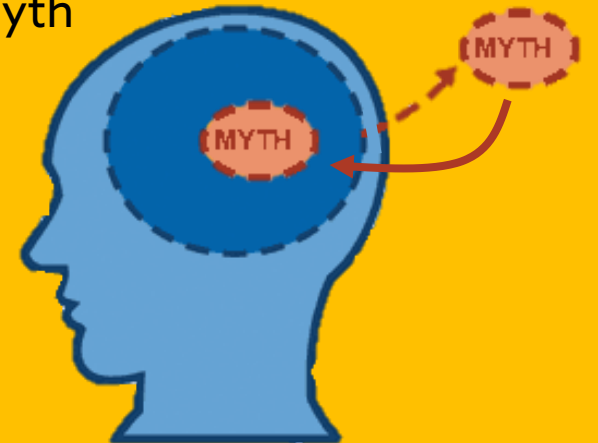
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Why facts are not enough

(1) Misinformation sticks when there's no alternative narrative

Continued Influence Effect
Despite a retraction, people continue to rely on misinformation

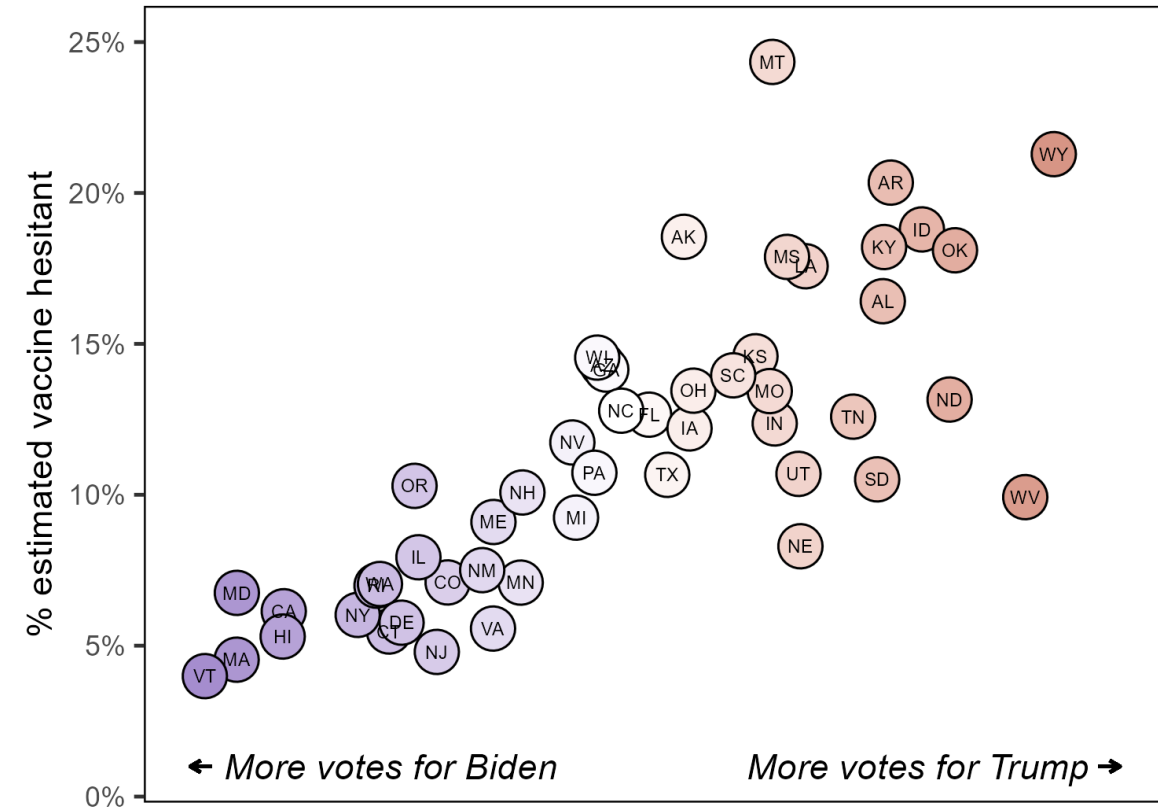
Removing myth leaves a gap



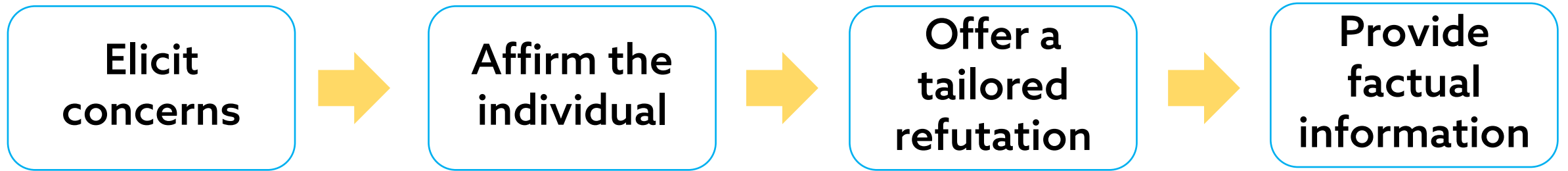
Why facts are not enough

(2) Rejection of evidence
(and narratives) inconsistent
with worldview

States with larger Trump vote shares had larger % of adults estimated to be vaccine hesitant...



The Empathetic Refutational Interview



Foundational principles:

(1) Empathy

- HCPs are trusted advisors
- Maintaining that trust is important!

(2) Attitude roots



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The attitude root "tree" of misinformed beliefs

Vaccines will overload my immune system.

Governments are using vaccines to control us.

Vaccines cause autism.

The vaccines are microchips.

I'm suspicious of the government's vaccination campaigns.

The disease isn't real, it's just a hoax.

Vaccines have frequent & serious side effects.

I'm trying to get pregnant, it will affect that.

I have allergies, I can't have any vaccines.

I have concerns about their safety, some vaccines contain

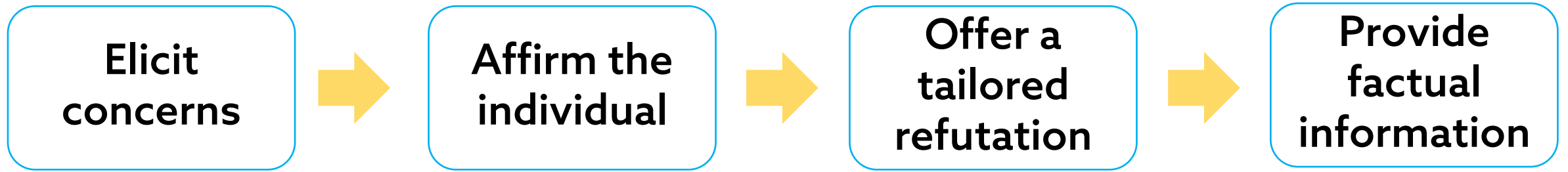
root
Fear & phobias

There are too many chemicals in vaccines.

Attitudinal
Conspiracist ideation

The vaccine companies are in cahoots with the government.

The Empathetic Refutational Interview



All 4 steps build on previous research evidence:

- Motivational interviewing
- Debunking misinformation
- Tailoring information



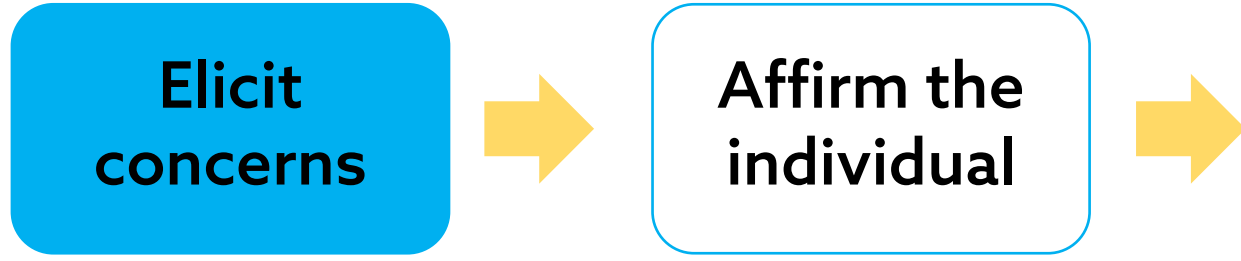
Holford et al. (2024) Health Psychology

<https://doi.org/10.1037/hea0001354>

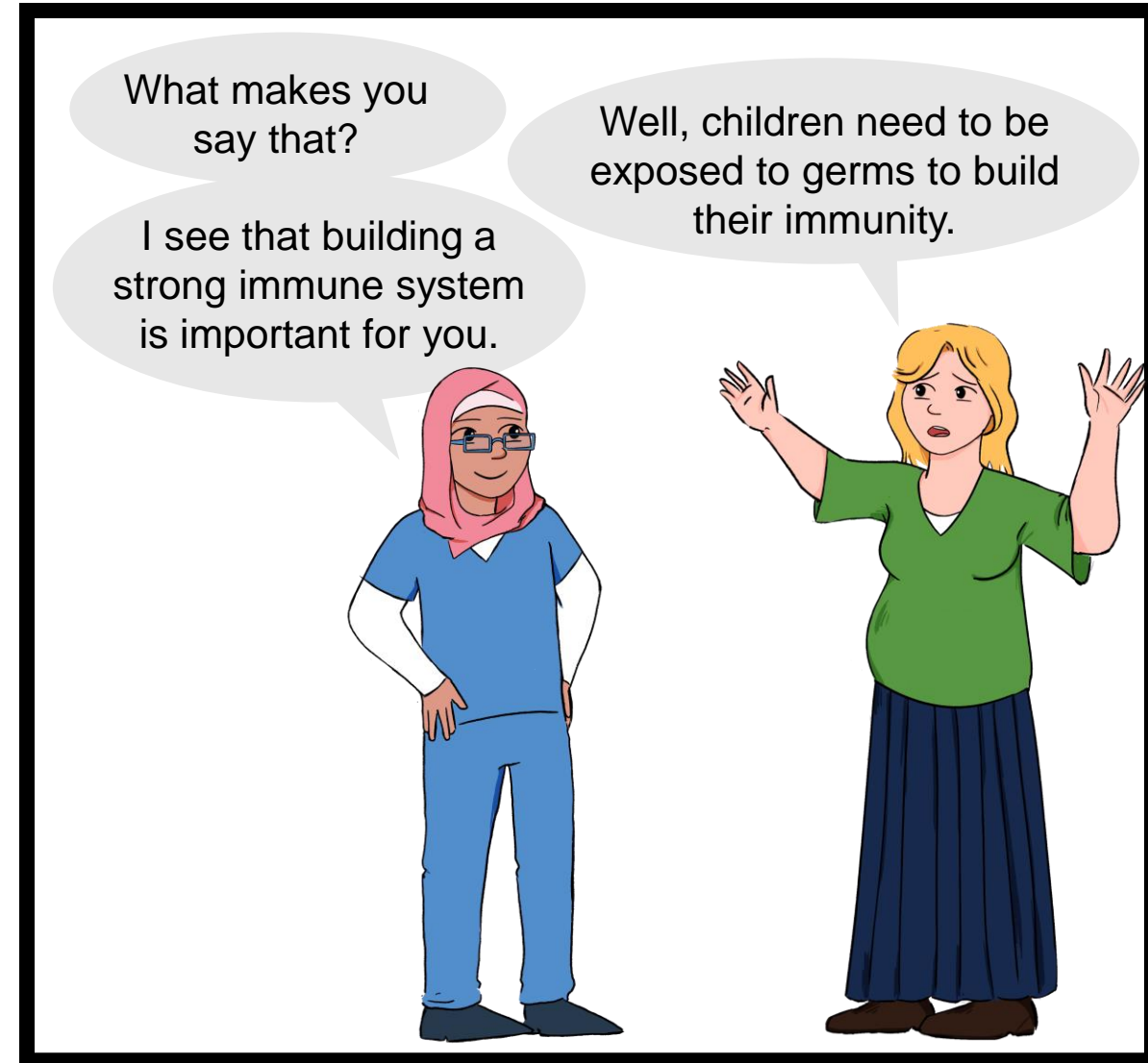


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The Empathetic Refutational Interview



- Motivational interviewing approach
- Open questions & listening
- Identify attitude root



The Empathetic Refutational Interview

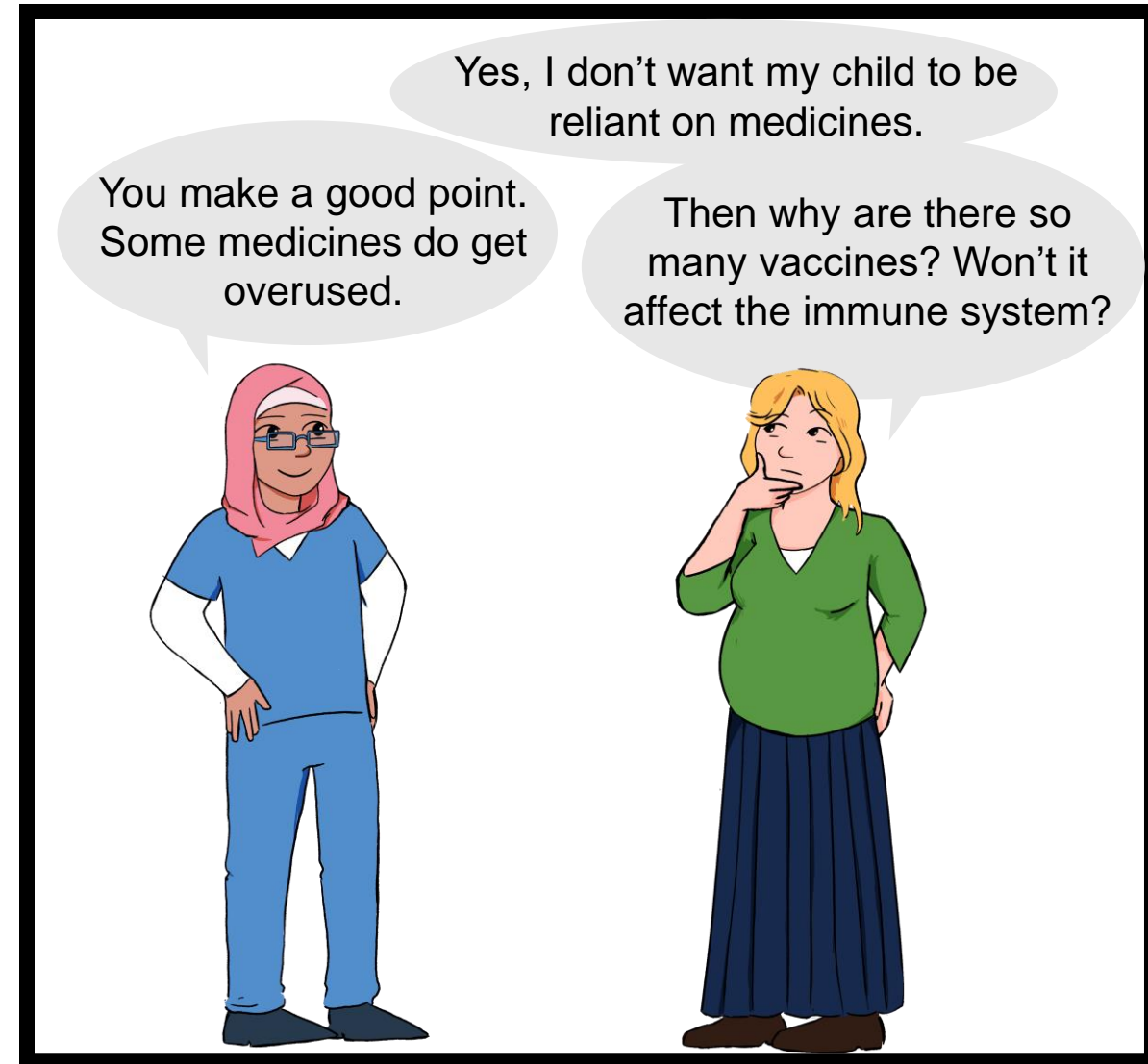
Elicit concerns



Affirm the individual



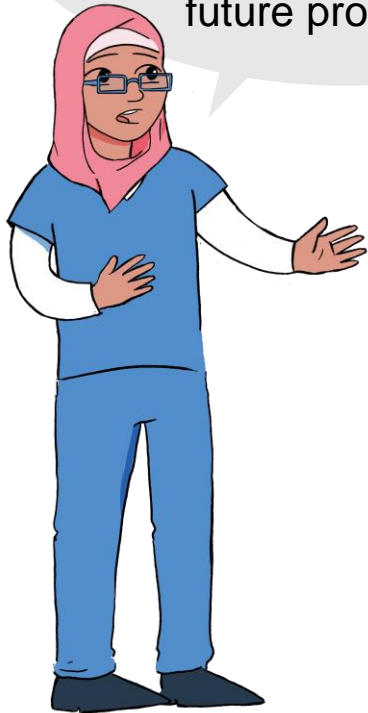
- Motivational interviewing approach
- Demonstrate empathy
- Validate, build rapport
- Align to attitude root



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The Empathetic Refutational Interview

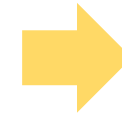
The vaccine is just showing the immune system what to look out for, so it can build its own resistance. It's still the body's natural response that creates future protection.



So... the immune system is still doing the work itself then...



Offer a tailored refutation



Provide factual information

Tailor to attitude root – work with, not against it:

- Target specific myths, not entire belief system
- Explain why misconception is wrong
- Replace with compelling alternative

The Empathetic Refutational Interview

Yes, the body gets enough exposure, but not *too* much like if you get measles, it can overwhelm and destroy future immunity instead.



Okay, that does make some sense...



Offer a
tailored
refutation



Provide
factual
information

- Summarise complex evidence
- Use analogies, illustrations, demystify concepts

ERI: from theory to practice...



From the lab



To the field

Lab studies with vaccine hesitant participants

Objectives

- Establishing proof of concept
- How do vaccine hesitant participants respond to this approach?

Field studies training HCPs

Objectives

- Implement ERI in HCP training
- > 200 trainees across 4 countries
- Patients recruited for follow-up

Experimental lab studies



- 4,245 vaccine-hesitant participants across studies
- Read conversation or watch video of **physician-patient interaction** [control or ERI]
- Report on vaccine willingness, receptivity to physician, trust (among others)

Example ERI video interaction



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Experimental lab studies



- 4,245 vaccine-hesitant participants across studies
- Read conversation or watch video of **physician-patient interaction** [control or ERI]
- Report on vaccine willingness, receptivity to physician, trust (among others)

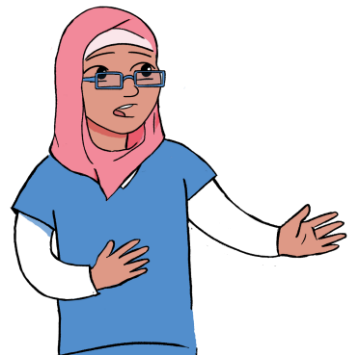
(simplified) example of a vignette:

ERI

[Affirm] It's true that some medicines do get overused. I see why you're worried.

[Refute] The vaccine is just showing the immune system what to look out for so it doesn't get overloaded when it encounters the actual disease.

I don't want my child to have any more vaccines. There are too many of them, her immune system will get overloaded.



Experimental lab studies

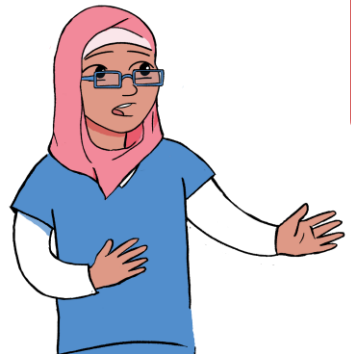


- 4,245 vaccine-hesitant participants across studies
- Read conversation or watch video of **physician-patient interaction** [control or ERI]
- Report on vaccine willingness, receptivity to physician, trust (among others)

(simplified) example of a vignette:

Control

[Factual benefits]
The vaccine is safe and effective, I would recommend it.



I don't want my child to have any more vaccines. There are too many of them, her immune system will get overloaded.



Experimental lab studies



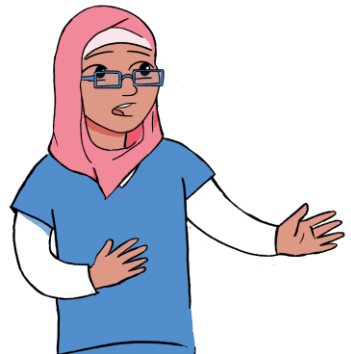
- 4,245 vaccine-hesitant participants across studies
- Read conversation or watch video of **physician-patient interaction** [control or ERI]
- Report on vaccine willingness, receptivity to physician, trust (among others)

(simplified) example of a vignette:

Third condition, e.g., MI or direct refutation

[Direct refutation]

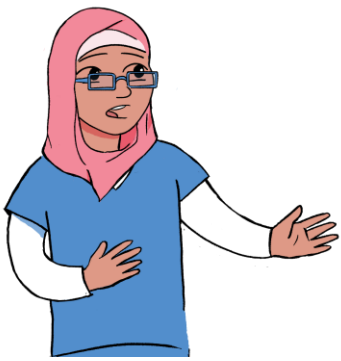
That's not true. The vaccine is just showing the immune system what to look out for so it doesn't get overloaded when it encounters the actual disease.



I don't want my child to have any more vaccines. There are too many of them, her immune system will get overloaded.



Experimental evidence from vignette study (comparing with direct refutation)

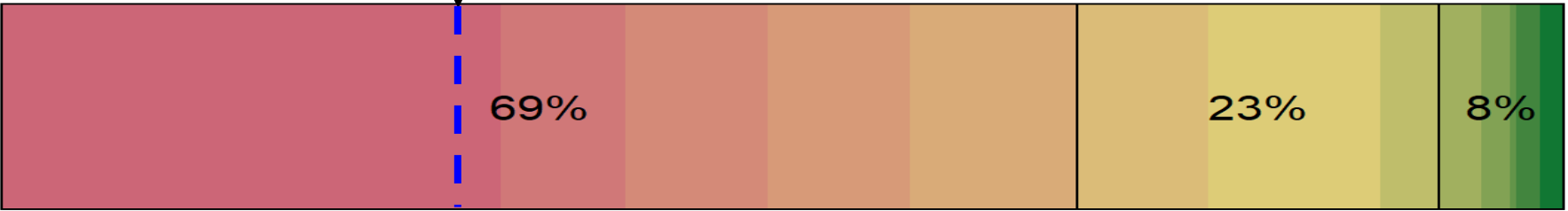


How much do you support the doctor's response?

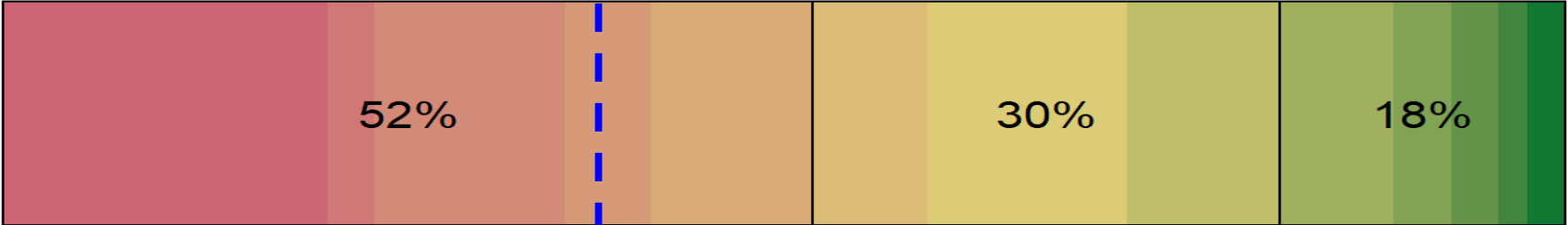
① ② ③ ④ ⑤ ⑥ ⑦



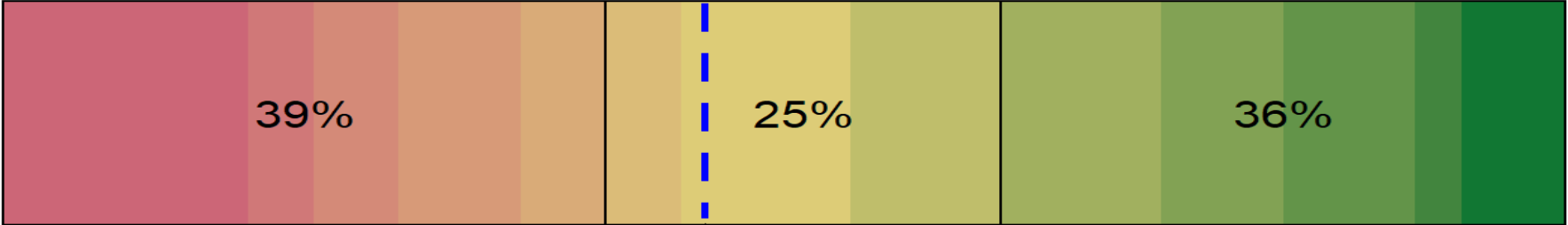
Average rating, control group



[Control] "Vaccines are safe and effective."



[Direct refutation] "That's not true...vaccines actually help..."



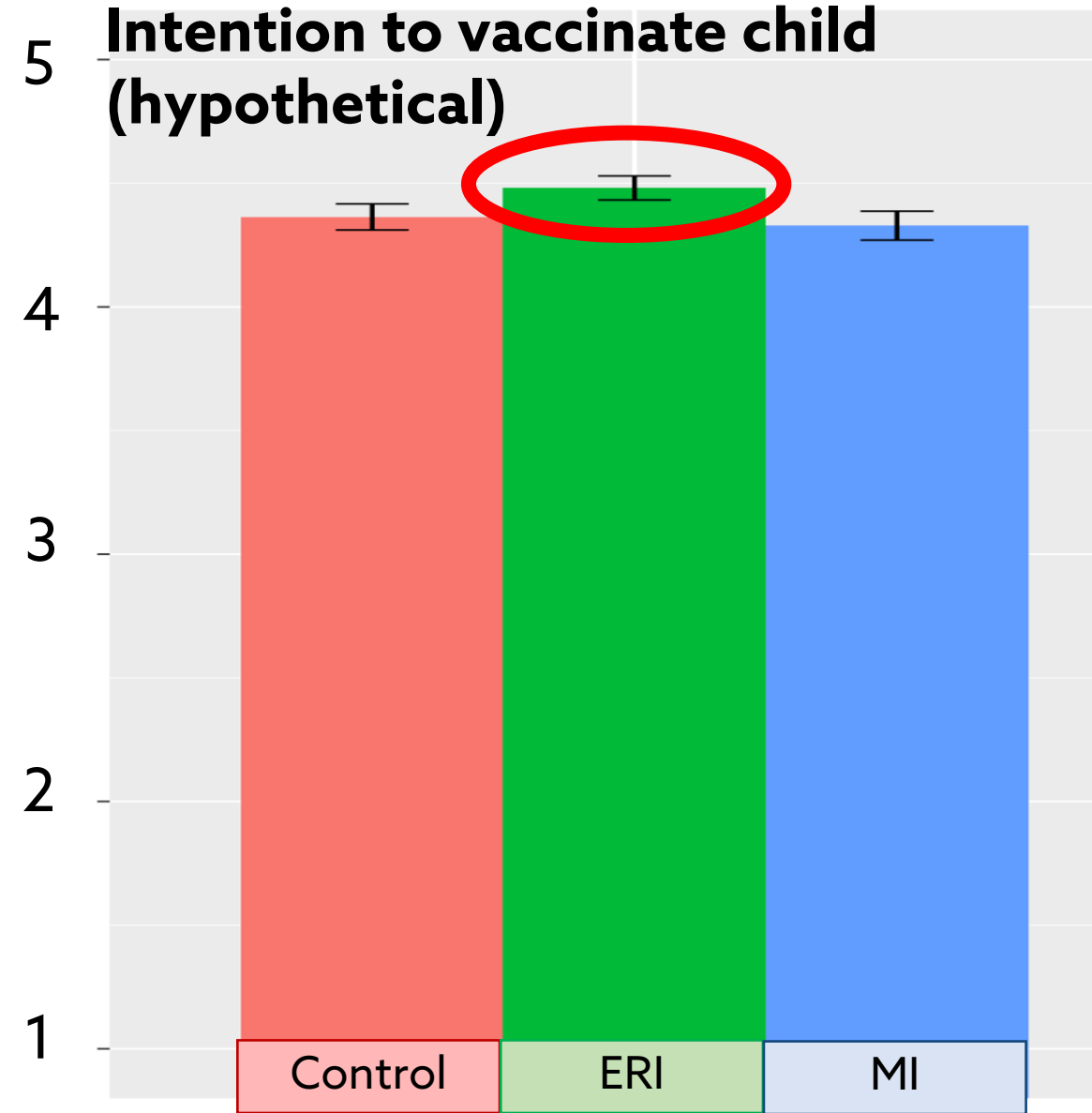
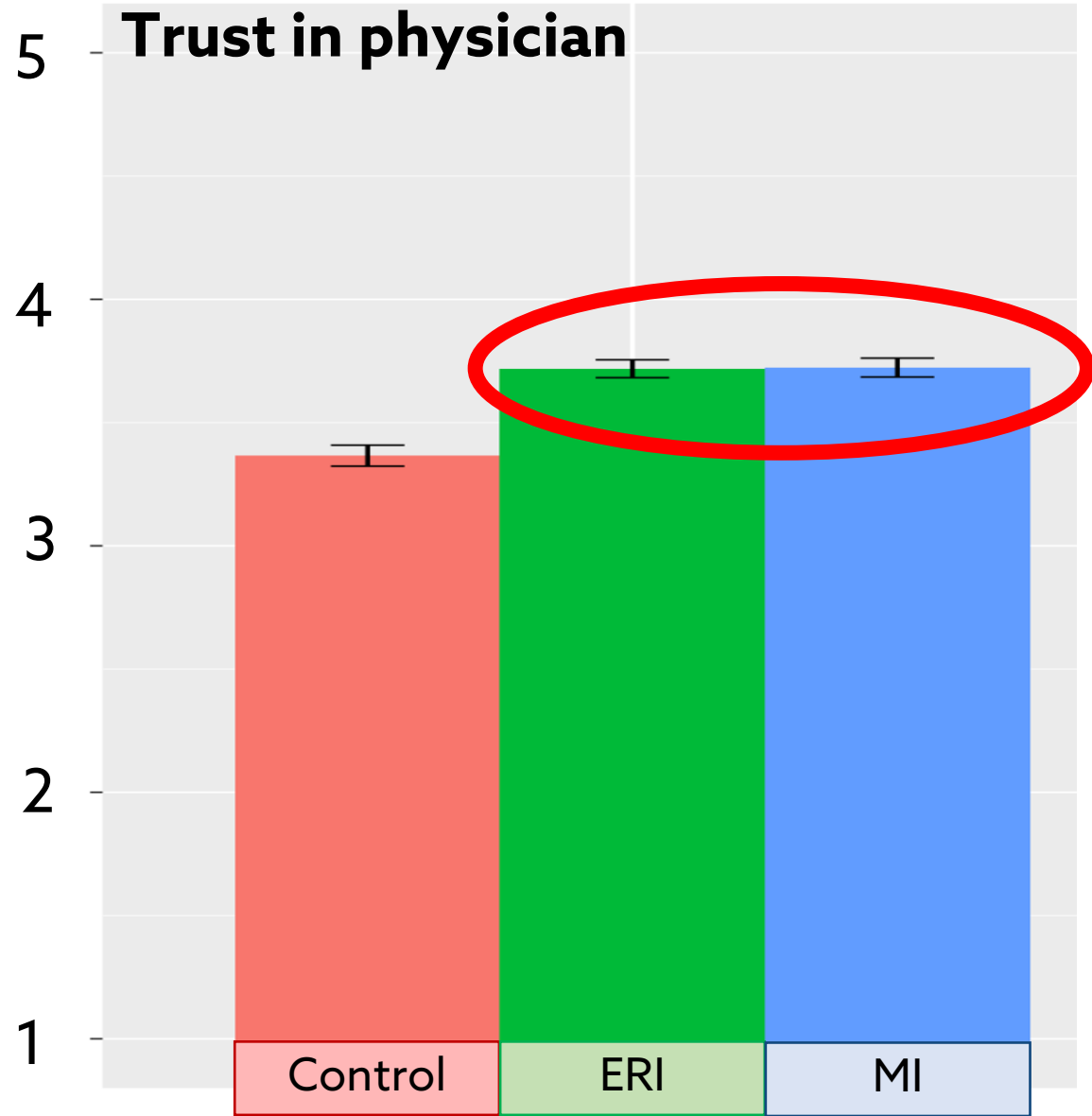
[Empathetic refutation] "You make a good point, I can see why..."



Average rating, affirmation + tailoring group



Experimental evidence from video study (with MI comparison)



ERI: from theory to practice...



From the lab



To the field

Lab studies with vaccine hesitant participants

Summary of findings:

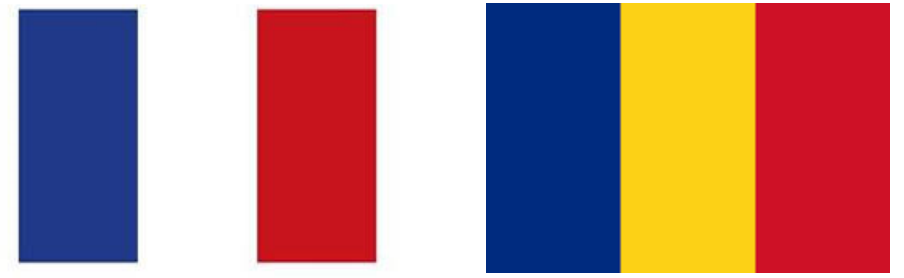
- ERI was **most supported** (compared to controls)
- Participants **trusted HCP using ERI more**
- And **more open to listening to HCP** using ERI
- ERI **increased intention to vaccinate**

Field studies training HCPs

Objectives

- Implement ERI in HCP training
- > 200 trainees across 4 countries
- Patients recruited for follow-up
- **Can HCPs successfully implement ERI?**

Field test design



Control group

No training

ERI group

Received ERI training
Romania: 1 day
France: 2 day + 3hr debrief after 1 month of practice

MI group

Received MI training
Romania: 1 day
France: 2 day + 3hr debrief after 1 month of practice

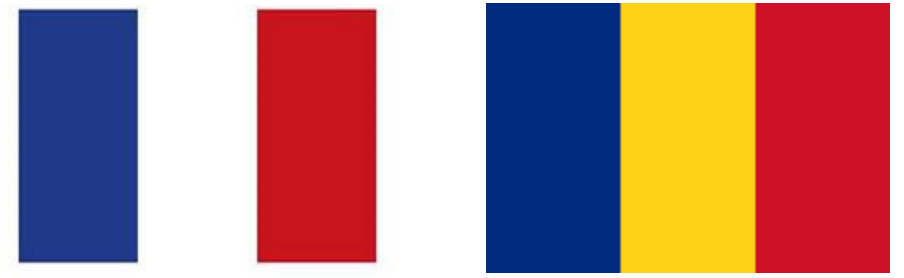
 France: Trainee GPs (in their first practice)

 Romania: GPs and nurses in 10 GP practices in each group



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Field test design



Control group

ERI group

MI group

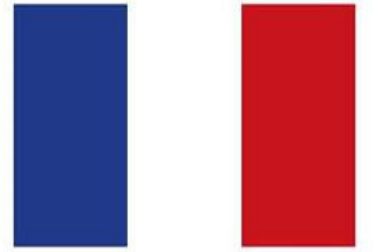


Consultation with hesitant patients



Patients fill in questionnaire before and after consultation.

Results: France



- **ERI group:** Significant improvement of patients' **vaccine confidence**
- **MI group:** Improvement in patients' **vaccine intention scores** (but not significantly different from the control group)
- **No significant difference between groups in patients' global vaccine readiness score**
 - **ERI: 6%; MI: 5%; Control: 4%**
- Possible that new GPs found it difficult to implement training in their first practice?

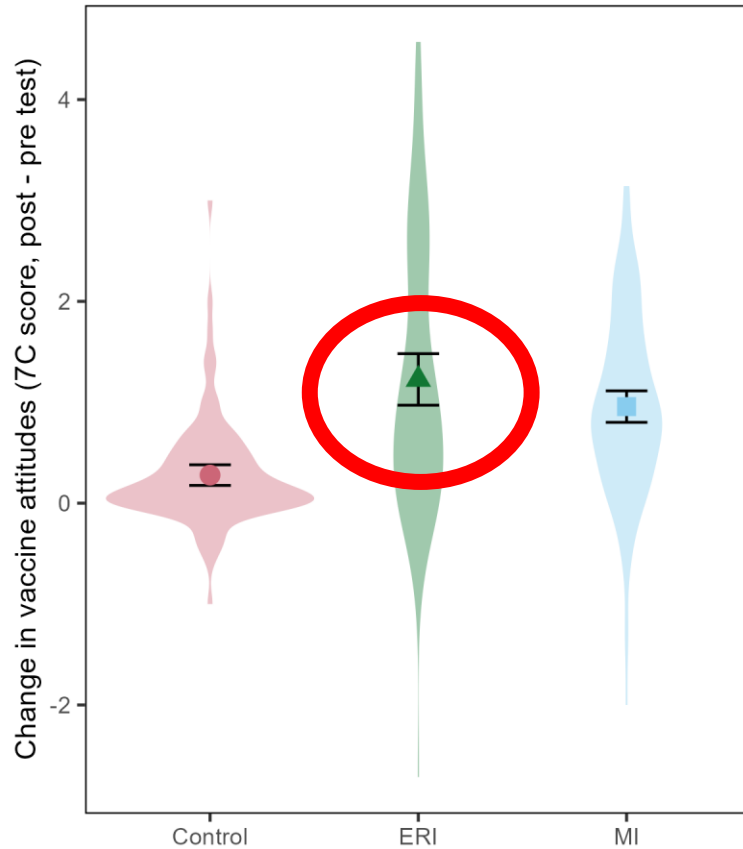


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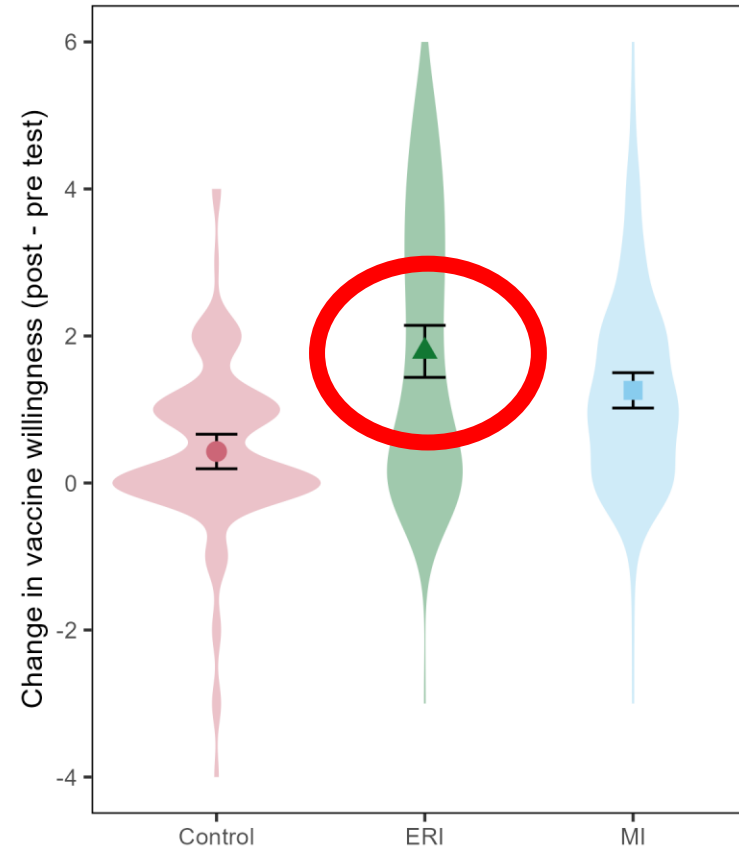
Results: Romania



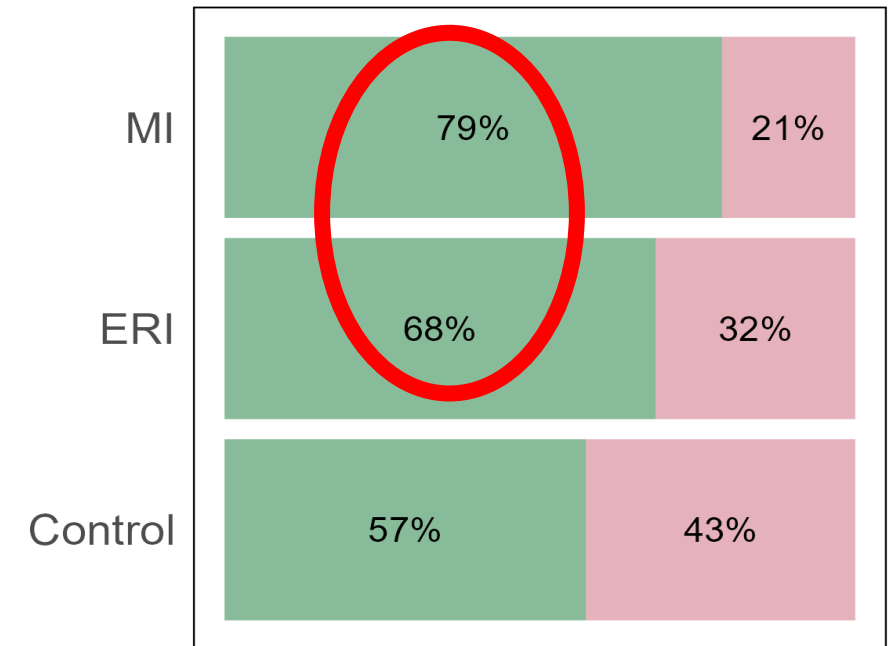
A. Change in vaccine attitudes



B. Change in vaccine willingness



C. Vaccine appointment booked



ERI from theory to practice: a summary



Lab studies with vaccine hesitant participants

Summary of findings:

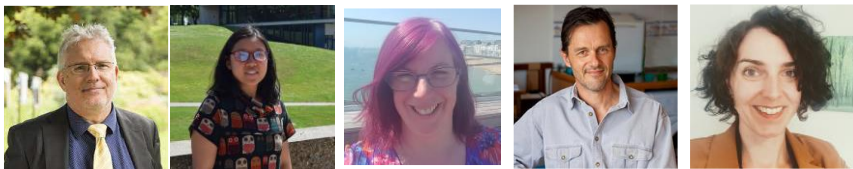
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Field studies training HCPs

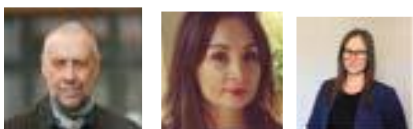
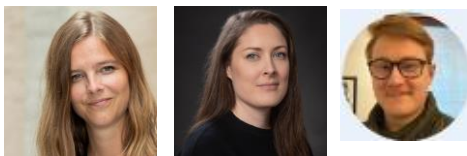
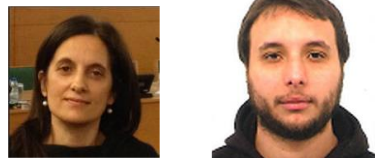
Summary of findings:

- HCPs reported more **skills & confidence**
- In France: HCPs **had difficulty apply training**
- In Romania: trained HCPs **improved patients' attitude & willingness** & saw **10-20% more vaccination bookings**

ERI is a promising intervention, we need to assess best practice for training to help different groups in different countries.



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Thank you!

dawn.holford@bristol.ac.uk

<https://jitsuvax.com>